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10/603,894	06/25/2003	James D. Burrington	3243	4894

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EXAMINER

COSTALES, SHRUTI S

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,894

Applicant(s)

BURRINGTON ET AL.

Examiner

Shruti S. Costales

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/3/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on February 3, 2005 was filed in compliance with the provisions of 37 CFR § 1.97. Accordingly, the information disclosure statement filed by the applicant has been considered by the Examiner. It is to be noted that the IDS filed on June 25, 2003 has not been considered by the Examiner because the corresponding PTO-1449 for this IDS could not be located.

Specification

2. The abstract of the disclosure is objected to because the applicant fails to set forth in details that which is new in the art and to which the invention pertains.

Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

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(4) if a mixture, its ingredients;

(5) if a process, the steps.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

3. Claims 11, 22 and 23 are objected to because of the following informalities:

(i) The "and" appearing immediately preceding "a detergent" at line 23 of claim 11 is improper because "detergent" is not the last component in the recited list, rather the "antioxidant" is the last component in the recited list.

(ii) The "of" appearing before "an antioxidant" in claims 22 and 23 is grammatically incorrect.

(iii) The double periods ".." appearing at the end of component (c) in claim 23 are improper and may be replaced with a ",".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, claims 1, 4-8, 11-12, and 14-15 appear to improperly recite a Markush group. Consequently, it is impossible to determine which elements of the group are required by the presently cited claims. When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if “wherein R is a material selected from the group consisting of A, B, C and D” is a proper limitation, then “wherein R is A, B, C or D” shall also be considered proper (emphasis added). See MPEP § 2173.05(h).

5. Claims 3, 6-9, 12, and 14-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the “formula” “A+B+C” appearing in claim 3 is unclear as “A+B+C” does not appear to be a formula but rather a suggestion that each of the three components A, B, and C are being added together to prepare a gel composition. Further, claims 6-9, 12, and 14-19 are rejected under 35 U.S.C. 112, second paragraph, as being dependent from rejected claim 3 from which claims 6-9, 12, and 14-19 depend.

6. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. More particularly, claim 9 recites the phrase "of e.g.", which renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-6 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wallace (U.S. Patent Number 5,944,858).

Wallace discloses an additive composition not only capable of reducing the amount of soot, smoke and/or carbonaceous products produced on combustion of the fuel (Col. 2, lines 29-34) but that is also capable of reducing or inhibiting the amount of noxious emissions (e.g., carbon monoxide, unburned hydrocarbons, polyaromatic hydrocarbons, and/or particulates) formed when using the fuels in an engine or in a burner or like combustion apparatus (Col. 2, lines 39-45). The additive composition of Wallace comprises a) one or more fuel soluble manganese carbonyl compounds, b) one

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or more fuel soluble alkali or alkaline earth metal containing detergents, c) at least one fuel soluble ashless dispersant, d) at least one fuel soluble demulsifying agent, e) at least one aliphatic or cycloaliphatic amine, and f) at least one metal deactivator (Col. 2, lines 48-67 and Col. 3, lines 1-11).

The detergents of Wallace include phenates, sulfonates, salicylates, and salts of carboxylic acids, wherein the metals are sodium, potassium, lithium, calcium, magnesium, strontium, and barium (Col. 4, lines 19-67 and Col. 5, lines 1-33). The ashless dispersants of Wallace include polyisobutene succinimide (Col. 5, lines 38-67). See also Col. 8, lines 1-67; Col. 9, lines 1-67; and Col. 10, lines 1-52. The demulsifying agent includes poly(alkylphenol) formaldehyde condensates and the polyalkyleoxy modified reaction products thereof (Col. 10, lines 53-67). See also Col. 11, lines 1-67 and Col. 12, lines 1-3. The additive composition of Wallace may also include antioxidants such as one or more phenolic antioxidants (Col. 14, lines 14-28). Other components of the additive may include corrosion inhibitors (Col. 14, lines 29-67 and Col. 15, lines 1-16), cold flow improvers, pour-point depressants, antifoam agents, cetane improvers (Col. 15, lines 17-32). The amount of dispersant added is in a range of 0-15,000 ppm (or, 0 – 1.5 wt%). It is to be noted that “a generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus”, and the species in that case will anticipate the genus. *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

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With regard to the recitation of a "gel" in the presently cited claims, "from the standpoint of patent law, a compound and all its properties are inseparable," *In re Papesch*, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963). Moreover, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977), and further "when the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not," *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). In fact, "products of identical chemical composition can not have mutually exclusive properties," and a chemical composition and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Wallace also discloses a method of improving the combustion characteristics of an at least predominantly hydrocarbonaceous liquid fuel during combustion in an engine, burner, or other combustion apparatus which comprises operating said engine, burner or other combustion apparatus on an at least predominantly hydrocarbonaceous liquid fuel containing a minor combustion-improving amount of the additive (Col. 21, lines 56-67).

In light of the above discussion, it is clear that the presently cited claim is anticipated.

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9. Claims 1-3, 5-8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Burrington et al. (U.S. Patent Number 6,843,916), hereinafter referred to as Burrington.

Burrington discloses lubricant additive gels (Col. 1, line 44) having an ashless dispersant, an over-based detergent (Col. 4, lines 20-25 and Col. 4, lines 29-32), and oil-soluble antioxidants (Col. 7, lines 22-33). See also Table I towards the bottom of Col. 8.

It is also disclosed that it is preferred that in one embodiment the ashless dispersant is a polyisobutenyl succinimide (Col. 4, lines 42-43). Other ashless dispersants include Mannich dispersants, carboxylic dispersants, amine dispersants, polymeric dispersants (Col. 6, lines 23-58). The oil-soluble detergents are disclosed by Burrington as being well known in the art including but not limited to overbased sulfonates, phenates, salicylates, carboxylates, and the like (Col. 5, lines 33-35). The oil-soluble antioxidants include but are not limited to alkyl-substituted phenols such as 2,6-di-tertiary butyl-4-methyl phenol, phenate sulfides, phosphosulfurized terpenes, sulfurized esters, aromatic amines, and hindered phenols, wherein an example of an antioxidant is a hindered, ester-substituted phenol, which can be prepared by heating a 2,6-dialkylphenol with an acrylate ester under base catalysis conditions, such as aqueous KOH, and wherein combinations of the various antioxidants may be used (Col. 7, lines 22-29). Many different types of oil-soluble lubricant additives are incorporated into currently-available lubricating oils, wherein examples include detergents, dispersants, extreme pressure agents, wear reduction agents, anti-oxidants, viscosity

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index improvers, anti-foaming agents, mixtures thereof and the like (Col. 5, line 27-32). See also Col. 3, lines 36-67; Col. 4, lines 1-67; Col. 5, lines 1-67; Col. 6, lines 1-67; Col. 7, lines 1-67; and Col. 8, lines 1-67. It is to be noted that "a generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus", and the species in that case will anticipate the genus. See *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

Further, the detergent may be present in the range from about 0.1% to about 25% (Col. 5, lines 39-44). The oil-soluble dispersant may be used in any combination and is present in an amount from about 0.1% to about 25% (Col. 5, lines 60-64). The antioxidants may be present in an amount from about 0% to about 12% (Col. 7, lines 30-33). Additional lubricant additives such as the viscosity index improvers are present in an amount of 40% or more (Col. 8, lines 22-32). The ratio of the detergent to the dispersant is typically from about 10:1 to about 1:10, more especially from about 5:1 to about 1:5, from about 4:1 to about 1:1 and even from about 4:1 to about 2:1 and the TBN of the overbased detergent is normally at least 100, more typically at least 300, or even 350 or even 400 (Col. 4, lines 33-38).

With regards to the "formula A+B+C" appearing in claim 3, if one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." One

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may look to the preferred embodiments to determine which compounds can be anticipated. *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962).

With regards to the intended use recited in claim 1 and all claims 2-19 depending directly or indirectly from claim 1, it is to be noted that the recitation in the cited claims that the composition is "used in an application" is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim. It is the Examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that the applicant discloses a composition comprising "one or more fuel additives in a form of a gel used in an application..." as presently claimed, it is clear that the additive gel of Burrington would be capable of performing the intended use, i.e. one of decreasing the amount of soot in oils and decreasing the amount of emissions in engine exhaust, presently claimed as required in the above cited portion of the MPEP, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

In view of the above discussion, it is clear that the presently cited claims are anticipated.

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1 and 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace in view of Burrington.

The discussion above regarding Wallace and Burrington in paragraphs 8 and 9 is herein incorporated by reference.

Although Wallace does not explicitly disclose a gel additive, Burrington discloses lubricant additive gels (Col. 1, line 44) having an ashless dispersant, an over-based detergent (Col. 4, lines 20-25 and Col. 4, lines 29-32), and oil-soluble antioxidants (Col. 7, lines 22-33). It would have been obvious to one skilled in the art to use the gel form of the additive of Burrington in the additive composition of Wallace because lubricant additive gels can slowly provide lubricant additives to a fluid such as an oil and oil-

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soluble lubricant additive gels slowly dissolve to their component lubricant additive parts when exposed to the oil flowing through an oil filter because the rate of dissolution of these gels is so slow, and because these gels dissolve into their component lubricant additives, they effectively achieve slow release of these additives into the oil being filtered, therefore they can be used as is, without an inert carrier or a non lubricant additive matrix, such as a polymeric backbone or complicated mechanical systems needed in earlier systems for achieving slow release of lubricant additives (Col. 1, lines 43-57 of Burrington), thereby obtaining the invention as set forth in the presently cited claim 1.

Although Wallace does not disclose specific positioning of the additive, specific filter systems, or a specific gel containment device, Burrington discloses a new oil filter for use in commercial and/or industrial systems such as on an internal combustion engine, wherein the filter comprises a housing, a filter for removing particulate matter from the oil passing through the filter and oil-soluble lubricant additives inside the housing for slow release into the oil, wherein at least some of the oil-soluble lubricant additives are in the form of a lubricant additive gel (Col. 1, lines 66-67 and Col. 2, lines 1-6). Burrington also discloses that the lubricant-additive gel can be used in any fluid conditioning device including but not limited to internal combustion engines, stationary engines, lubricated mechanical systems, hydraulic systems and the like (Col. 2, lines 7-11). It is also disclosed by Burrington that a reservoir 124 shown in FIG. 1 of Burrington is arranged so that all or substantially all of the oil passing into the filter contacts the lubricant additive gel and wherein some of the oil bypasses reservoir 24 as shown by

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arrow F (Col. 3, lines 1-10). Also, according to Burrington, the location of the gel in a mechanism, such as the filter or any location outside the filter that would provide access to the gel slowly releasing into the fluid; the mechanism to hold the gel if any; the configuration of the device, for example the filter or the gel holder; or the design is not critical, and generally-can be any of those known for slow release agents or mechanisms (Col. 3, lines 12-36). Further, the fuel temperature of Burrington is intrinsically around 20° C because that is what normal room temperature is. It would have been obvious to one skilled in the art to use the filter/housing disclosed by Burrington for the additive composition of Wallace because it would be possible for filtered oil to come into contact with the lubricant additive (Col. 3, lines 34-36), thereby obtaining the invention as set forth in the presently cited claims.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace in view of Orr (U.S. Patent Number 6,652,608).

The discussion above regarding Wallace in paragraph 8 is herein incorporated by reference.

Although Wallace does not explicitly disclose organometallic fuel borne catalysts of Na, K, Co, etc., Orr discloses at least one high heating combustible compound containing at least one element selected from the group consisting of aluminum, boron, bromine, bismuth, beryllium, calcium, cesium, chromium, cobalt, copper, francium, gallium, germanium, iodine, iron, indium, lithium, magnesium, manganese, molybdenum, nickel, niobium, phosphorus, potassium, palladium, rubidium, sodium, tin,

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zinc, praseodymium, rhenium, silicon, vanadium, strontium, barium, radium, scandium, yttrium, lanthanum, actinium, cerium, thorium, titanium, zirconium, hafium, praseodymium, protactinium, tantalum, neodymium, uranium, tungsten, promethium, neptunium, samarium, plutonium, ruthenium, osmium, europium, americium, rhodium, iridium, gadolinium, curium, platinum, terbium, berkelium, silver, gold, dysprosium, californium, cadmium, mercury, holmium, titanium, erbium, thulium, arsenic, antimony, ytterbium, selenium, tellurium, polonium, lutetium, astatine, mixture thereof, including organic and inorganic derivatives (Col. 56, lines 17-47). It would have been obvious to one skilled in the art to add the catalyst of Orr to the additive composition of Wallace because the addition of said catalyst would result in an improvement in the combustion of a fuel to which the additive would be added (Col. 56, lines 13-17), thereby obtaining the invention as set forth in claim 9 of the present application.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

It is to be noted that two obviousness-type double patenting rejections are set forth below, wherein each rejection is designated sequentially by the letters A-B.

Double Patenting Rejection - A

14. Claims 1-2 and 11-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/603,517. Note that the publication corresponding to said copending application is being cited on the attached PTO form 892. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

Firstly, it is to be noted that both the present claims and the claims of '517 are drawn to very similar additive compositions with the caveat that the term "gel" in the present claims is not explicitly recited in the claims of '517. However, noting that the gel is used by the present applicants as a label to describe the same set of additive components (viz. dispersant, detergent, and antioxidant) as the set recited in the '517 claims, it is therefore the Examiner's position that the term "gel" per se does not impart substantive patentable distinction to the present claims as opposed the cited claims of '517.

Secondly, with respect to the details of the additive components and other recited features, note that claims 1-18 of '517 recite an additive composition comprising a dispersant and an antioxidant used in an application selected from the group comprising decreasing the amount of soot in a lubricating oil of an engine, decreasing the amount of emissions in an engine's exhaust and combinations thereof. The emissions reduced

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are selected from the group comprising soot, hydrocarbons and/or Nox. The additive composition further comprises at least one lubricant additive selected from the group comprising detergents, overbased detergents, carbon black, silica, alumina, titania, magnesium oxide, calcium carbonate, lime, clay, zeolites, extreme pressure (EP) agents, wear reduction agents, viscosity index improvers, anti-foaming agents, friction reducing agents, anti-misting agents, cloud-point depressants, pour-point depressants, mineral and/or synthetic oils mixtures thereof and combination thereof and in the range of about 0% to about 95% of the additive composition. The dispersant is in the range of about 0.1% to about 95% and the antioxidant is in the range of about 0.01% to about 99% of the additive composition. The antioxidant is selected from the group comprising alkyl-substituted phenols. The dispersant is selected from the group comprising ashless type dispersants such as Mannich dispersants, polymeric dispersants, etc.

The presently cited claims of '517 also recite a process comprising contacting a portion of an engine oil with the recited additive composition resulting in the reduction of soot in the engine oil and/or emissions in an engine exhaust. Further, the additive composition is positioned to contact the oil in an area selected from the group comprising full flow oil, bypass of oil, in the reservoir and combinations thereof. The additive composition is located in an area selected from the group comprising a filter, a drain pan, etc. The additive composition is in contact with the engine oil in the range of about 100% to 1% of the engine oil. The process further comprises adding to the engine oil the additive composition all at the same time, a portion of the components

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over its service life, continuously to the engine oil over the service life of the oil and combinations thereof.

'517 also recites an oil filter for an engine oil lubricating system comprising a housing, a filter for removing particulate matter from an oil bypass filter and a container with an additive composition wherein the additive composition comprises a dispersant and an antioxidant and results in the reduction of one of the following from an engine soot, NOx hydrocarbons or combinations thereof. Further, an additive composition containment device for an engine oil lubricating system comprising a housing and a container with an additive composition, and wherein the additive composition comprises a dispersant and an antioxidant for the reduction of soot from lubricating systems, engine emissions reduction or combinations thereof is also recited.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claims 1-2 and 11-21 are directed to an invention not patentably distinct from claims 1-18 of the commonly assigned copending application, namely 10/603,517. Specifically, refer to the discussion above in paragraph 14.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 10/603,517, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this

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application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Double Patenting Rejection - B

16. Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/603,644. Note that the publication corresponding to said copending application is being cited on the attached PTO form 892. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

Firstly, it is to be noted that both the present claims and the claims of the copending application '644 are drawn to essentially identical additive compositions except that the present claims recite "fuel" instead of "lubricant" as recited in '644 to describe otherwise identical claimed subject matter.

Secondly, with respect to the details of the additive components and other recited features, note that claims 1-24 of '644 recite a composition comprising one or more

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lubricant additives in a form of a gel used in an application selected from the group comprising decreasing the amount of soot in the lubricating oil engine, decreasing the amount of emissions in the engine exhaust and combinations thereof. The gel comprises a dispersant, a detergent and an antioxidant, and the gel is represented by the formula $A+B+C$ wherein A equals at least one component with at least one or more reactive or associative groups; wherein B equals a particle or other component with at least one group which reacts or associates with component A to form a gel and wherein C at least one or more lubricant additives. The emissions reduced are selected from the group comprising soot, NO_x, hydrocarbons and combinations thereof. Component A is selected from the group comprising antioxidants, dispersants, succinics, etc., in the range of about 0.1% to about 95% of the gel. Component B is selected from the group comprising dispersants, detergents, overbased detergents, carbon black, silica, etc., in the range of about 0.1% of about 99% of the gel. Component C is selected from the group comprising antioxidants, extreme pressure agents, wear reduction agents, etc., in the range of about 0% to about 95% of the gel.

The gel of '644 comprises an overbased detergent and an ashless succinimide dispersant and wherein the ratio of detergent to dispersant is of about 10:1 to about 1:10, wherein the total base number (TNB) of the overbased detergent is in the range from about 100 to about 400. The dispersant is selected from the group comprising ashless succinimide, polyisobutenyl succinimide, etc.; a detergent selected from the group comprising overbased sulfonates, phenates, salicylates, carboxylates, etc.; and an antioxidant selected from the group comprising alkyl-substituted phenols etc.

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A process comprising contacting a portion of the engine oil with the recited gel composition resulting in the reduction of soot in the engine oil and/or emissions in an engine exhaust is also recited in '644. The gel is positioned to contact the oil in an area selected from the group comprising full flow oil, bypass of oil, in the reservoir and combinations thereof. The gel is located in an area selected from the group comprising a filter, a drain pan, an oil bypass loop, etc. The gel is in contact with the engine oil in the range of about 100% to 5% of the engine oil. The gel at the end of its service life contains a range of none to a portion of the components in the gel remaining at the end of the service life of the gel due to selective dissolution of the gel. The process further includes adding to the engine oil at the same time all or a portion of the components of the gel and in portions to the engine oil over its service life.

'644 also recites an oil filter for an engine oil lubricating system comprising a housing, a filter for removing particulate matter from an oil bypass filter and a container with a soot-reducing gel wherein the gel comprises a dispersant, a detergent, an antioxidant and combinations thereof and results in the reduction of one of the following from an engine soot, emission or combinations thereof. A gel containment device for an engine oil lubricating system comprising a housing and a container with a gel, and wherein the gel comprises a dispersant, a detergent, an antioxidant and combinations thereof for the soot reduction, emissions reduction or combinations thereof of an engine is also recited.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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17. Claims 1-21 are directed to an invention not patentably distinct from claims 1-24 of the commonly assigned copending application, namely 10/603,644. Specifically, refer to the discussion above in paragraph 16.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 10/603,644, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bloch et al. (U.S. Patent Number 6,004,910) discloses a lubricant

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composition having ashless dispersants and hindered phenol antioxidant, wherein the lubricant is effective to minimize soot.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shruti S. Costales whose telephone number is (571) 272-8389. The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

SSC
Shruti S. Costales
June 21, 2005

Vasu Jagannathan
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